

27. (Previously added) The method of claim 26, wherein the reducing agent includes a borohydride.
28. (Previously added) The method of claim 24, wherein the step of treating the substrate with a reducing agent includes contacting at least a portion of either the active or first surface of the substrate with an aqueous solution containing between 0.1 and 1% sodium borohydride by volume.
29. (Previously added) The method of claim 28, wherein the aqueous solution contains between 0.2% and 0.3% sodium borohydride by volume.
30. (Canceled) The method of claim 24, wherein said autofluorescence is reduced by at least an order of magnitude RFU.
31. (Previously added) The method of claim 24, wherein said substrate is treated for at least 10 minutes with said reducing agent.
32. (Previously added) The method of claim 24, further comprising a step of scanning the substrate.
33. (Currently amended) The method of claim 32, wherein said scanning step includes scanning the substrate for a fluorescent label.
34. (Previously added) The method of claim 24, wherein said substrate is made from a material selected from the group consisting of inorganic materials, glass, ceramic materials, metals, and semiconductor materials.
35. (Previously added) The method of claim 24, wherein said substrate is made from a material selected from the group consisting of organic materials, polyesters, polybutylene terephthalate, polyvinylchloride, polyvinylidene fluoride, polytetrafluoroethylene,

polycarbonate, polyamide, poly(meth)acrylate, polystyrene, polyethylene or ethylene/vinyl acetate copolymer.

36. (Previously added) The method of claim 24, wherein said biological or synthetic molecule includes at least one of the following species: ribonucleic acids (RNA), deoxyribonucleic acids (DNA), synthetic oligonucleotides, antibodies, proteins, peptides, lectins, modified polysaccharides, cells, synthetic composite macromolecules, functionalized nanostructures, synthetic polymers, modified/blocked nucleotides/nucleosides, modified/blocked amino acids, fluorophores, chromophores, ligands, chelates, and haptens.

37. (Previously added) A substrate having an array of biomolecules non-covalently attached thereto produced by the method of claim 24.

38. (Previously added) The substrate of claim 24, wherein the biomolecules are nucleic acids or oligonucleotides.

39. (Currently amended) The substrate of claim 24, wherein the substrate is-contains an array of nucleic acids or oligonucleotides.

Remarks

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested.

Claims 24-39 remain in this application. Claims 24, 33, and 39, have been amended. Claim 30 has been canceled.

1. Claim Objections

Applicant thanks the Patent Office for indicating that claims 30-31 and 35 would be allowable, but for that they dependent upon a rejected independent base claim. The Patent Office states that Schena *et al.* and the other references are silent regarding the problems associated with auto-fluorescence of the substrate; problems which the Applicant has recognized and solved.

2. § 112 Rejections

The Examiner rejects claims 33 and 39 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has corrected the errors as indicated above.

3. § 102 / § 103 Rejections

The Patent Office rejects claims 24-29, 32-34, 36-39 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as inherently obvious over the article by M. Schena *et al.*, (Proc. Natl. Acad. Sci. USA, Vol. 93, October 1996, Biochemistry, pp. 10614-10619). The Patent Office alleges that even though the Schena *et al.* do not teach that their substrate had a residual fluorescence or that treating the substrate with a sodium borohydridic solution would reduce the substrate's auto-fluorescence, by treating the printed array slide in a sodium borohydridic solution, the authors inherently reduced auto-fluorescence of the printed slide. The Patent Office asserts that the claiming of a new use, new function, or unknown property, which is inherently present in the prior art does not make the claim patentable.

Applicant has amended claim 24 to incorporate the allowable subject matter of claim 30, thus distinguishing the pending claims from Schena *et al.* Hence, Applicant requests that the Patent Office withdraw this rejection.

4. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests reconsideration of the pending claims and a prompt Notice of Allowance thereon.

Applicant believes that no extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Vincent T. Kung at 607-974-0608.

Respectfully submitted,
CORNING INCORPORATED

Date: October 16, 2003

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8: I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents, Alexandria, VA 22313-1450 on <u>October 16, 2003</u> Date of Deposit
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